

# Interference Search Printout

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L7	130	(reciprocat\$ and saw and ring and groove and bearing)".clm"	US-PGPUB	OR	ON	2007/03/16 13:19

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	939	30/392-394.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/16 13:07
L2	793	30/392-394.ccls.	USPAT; USOCR	OR	ON	2007/03/16 13:16
L3	176	(reciprocat\$ near2 saw) same ring	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/16 13:17
L4	457	(reciprocat\$ and saw and ring)".clm"	US-PGPUB	OR	ON	2007/03/16 13:18
L5	149	((reciprocat\$ near2 saw) and ring)".clm"	US-PGPUB	OR	ON	2007/03/16 13:18
L6	244	(reciprocat\$ and saw and ring and groove)".clm"	US-PGPUB	OR	ON	2007/03/16 13:19
L7	130	(reciprocat\$ and saw and ring and groove and bearing)".clm"	US-PGPUB	OR	ON	2007/03/16 13:19
S1	16	("20010034941" "3945120" "5009012" "5050307" "5450925" "6249979" "6688005" "6810589").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/08/31 10:50
S2	1	"6688005"	US-PGPUB; USPAT	OR	ON	2005/08/31 15:43
S3	46	"3945120"	US-PGPUB; USPAT	OR	ON	2005/08/31 15:56
S4	199	30/391.ccls.	US-PGPUB; USPAT	OR	ON	2005/08/31 16:12
S5	3096383	"30"/(392-394).ccls.	US-PGPUB; USPAT	OR	ON	2005/08/31 16:13
S6	493	30/392.ccls.	US-PGPUB; USPAT	OR	ON	2005/08/31 16:38
S7	143	S6 not S5	US-PGPUB; USPAT	OR	ON	2005/08/31 16:13
S8	247	30/393-394.ccls.	US-PGPUB; USPAT	OR	ON	2005/08/31 16:40
S9	247	S8 not (S6 and S4)	US-PGPUB; USPAT	OR	ON	2005/08/31 16:38
S10	179	S8 not S6	US-PGPUB; USPAT	OR	ON	2005/08/31 16:38
S11	68	30/393-394.ccls. and groove	US-PGPUB; USPAT	OR	ON	2005/08/31 16:45

## EAST Search History

S12	179	S8 not S11	US-PGPUB; USPAT	OR	ON	2005/09/01 09:26
S13	427	173/162.1-162.2.ccls.	US-PGPUB; USPAT	OR	ON	2005/09/01 10:02
S14	8	("2899934"   "4776408"   "5311948"   "5573075"   "5813477"   "6123243"   "6192997").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/01 09:34
S15	249	173/210.ccls.	US-PGPUB; USPAT	OR	ON	2005/09/01 10:27
S16	1191	"173"/\$.ccls. and vibration	US-PGPUB; USPAT	OR	ON	2005/09/01 10:28
S17	164	"173"/\$.ccls. and (vibration same ring)	US-PGPUB; USPAT	OR	ON	2005/09/01 10:28
S18	19	"173"/\$.ccls. and (vibration same ring same groove)	US-PGPUB; USPAT	OR	ON	2005/09/01 10:31
S19	75	"173"/\$.ccls. and (vibration same groove)	US-PGPUB; USPAT	OR	ON	2005/09/01 10:32
S20	56	S19 not S18	US-PGPUB; USPAT	OR	ON	2005/09/01 10:31
S21	130	"173"/\$.ccls. and ((vibration or shock) same groove)	US-PGPUB; USPAT	OR	ON	2005/09/01 10:40
S22	55	S21 not S19	US-PGPUB; USPAT	OR	ON	2005/09/01 10:33
S23	111	S21 not S18	US-PGPUB; USPAT	OR	ON	2005/09/01 10:33
S24	106	"30"/\$.ccls. and ((vibration or shock) same groove)	US-PGPUB; USPAT	OR	ON	2005/09/01 10:40
S25	31	"30"/\$.ccls. and ((vibration or shock) same groove same saw)	US-PGPUB; USPAT	OR	ON	2005/09/01 10:42
S26	3	((vibration or shock) same groove same (saw near3 reciprocat\$5))	US-PGPUB; USPAT	OR	ON	2005/09/01 10:43
S27	148	((vibration or shock) same groove same saw )	US-PGPUB; USPAT	OR	ON	2005/09/01 11:07
S28	217	83/647.ccls.	US-PGPUB; USPAT	OR	ON	2005/09/01 11:07
S29	22	83/647.ccls. and bearing	US-PGPUB; USPAT	OR	ON	2005/09/01 11:08
S30	28	83/646.ccls. and bearing	US-PGPUB; USPAT	OR	ON	2005/09/01 11:08
S31	12	("2737984"   "2917088"   "3236111"   "3269197"   "3457796"   "3461732").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/06 14:34

## EAST Search History

S32	30	("0712438"   "1325982"   "1362657"   "1656450"   "2088670"   "2122517"   "2154651"   "2561726"   "2685874"   "2999407"   "3202239"   "3379278"   "3525531"   "3757891"   "3910590"   "3916478"   "3920086").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/06 14:36
S33	7	("4081038").URPN.	USPAT	OR	ON	2005/09/06 14:38
S34	5	("3712387"   "4131165"   "4434859"   "4681172"   "5873579").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/06 14:42
S35	0	("6578644").URPN.	USPAT	OR	ON	2005/09/06 14:43
S36	13	("2512149"   "4133394"   "4358041"   "5145265"   "5884828"   "5896934"   "5901894"   "5944120"   "6085958"   "6098723"   "6123242"   "6123243").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/06 14:44
S37	0	("6705409").URPN.	USPAT	OR	ON	2005/09/06 14:48
S38	30	("0895349"   "1035358"   "1220100"   "2046135"   "2223727"   "3003773"   "3161241"   "3167135"   "3179185"   "3566978"   "3847229"   "4174113"   "4332340"   "4653338"   "5095998"   "5131476"   "5131666"   "5320177"   "5350025"   "5522606"   "5896934").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/06 15:00
S39	757	"30"/\$.ccls. and (reciprocate\$5 near2 saw)	US-PGPUB; USPAT; USOCR	OR	ON	2005/09/06 15:01
S40	536	"30"/\$.ccls. and (reciprocate\$5 near2 saw)	US-PGPUB; USPAT	OR	ON	2005/09/06 15:01
S41	2	"403"/\$.ccls. and ((o near1 ring) same (elastic or resilient) same vibration)	US-PGPUB; USPAT	OR	ON	2005/09/08 11:35
S42	27	"403"/\$.ccls. and ((o near1 ring) same vibration)	US-PGPUB; USPAT	OR	ON	2005/09/08 11:35
S43	2123	(o near1 ring) same vibration	US-PGPUB; USPAT	OR	ON	2005/09/08 13:21
S44	594	(o near1 ring) same vibration same (anti or damp\$5)	US-PGPUB; USPAT	OR	ON	2005/09/08 13:22
S45	2	(o near1 ring) same vibration same (anti or damp\$5) same saw	US-PGPUB; USPAT	OR	ON	2005/09/08 13:22
S46	14	( ring) same vibration same (anti or damp\$5) same saw	US-PGPUB; USPAT	OR	ON	2005/09/08 13:23
S47	320	vibrat\$5 same (anti or damp\$5) same saw	US-PGPUB; USPAT	OR	ON	2005/09/08 13:23

## EAST Search History

S48	3576	"277"\$/ccls. and (o near1 ring)	US-PGPUB; USPAT	OR	ON	2005/09/12 13:58
S50	1724	"277"\$/ccls. and ((o near1 ring) same groove)	US-PGPUB; USPAT	OR	ON	2005/09/12 14:48
S51	0	"277"/285.ccls. and ring	US-PGPUB; USPAT	OR	ON	2005/09/12 14:49
S52	0	277/285.ccls. and ring	US-PGPUB; USPAT	OR	ON	2005/09/12 14:49
S53	0	277/285.ccls.	US-PGPUB; USPAT	OR	ON	2005/09/12 14:49
S54	90	285/918.ccls. and ring	US-PGPUB; USPAT	OR	ON	2005/09/12 14:59
S55	28	285/344.ccls. and ring	US-PGPUB; USPAT	OR	ON	2005/09/12 15:00
S56	112	277/614.ccls. and ring	US-PGPUB; USPAT	OR	ON	2005/09/12 15:07
S57	544	277/910.ccls. and ring	US-PGPUB; USPAT	OR	ON	2005/09/12 15:41
S58	172	277/641.ccls. and ring	US-PGPUB; USPAT	OR	ON	2005/09/12 15:41
S59	286	277/641-643.ccls. and ring	US-PGPUB; USPAT	OR	ON	2005/09/12 15:41
S60	8910	pipe same (o near1 ring)	US-PGPUB; USPAT	OR	ON	2005/09/15 13:50
S61	2607	pipe near7(o near1 ring)	US-PGPUB; USPAT	OR	ON	2005/09/15 13:50
S62	17631	pipe near7 (o adj ring)	US-PGPUB; USPAT	OR	ON	2005/09/15 13:51
S63	2607	pipe near7 (o adj ring)	US-PGPUB; USPAT	OR	ON	2005/09/15 13:51
S65	2469	pipe same (o adj ring) same groove	US-PGPUB; USPAT	OR	ON	2005/09/15 13:51
S66	233	pipe near5 (o adj ring) near5 groove	US-PGPUB; USPAT	OR	ON	2005/09/15 13:52
S67	495	30/392.ccls.	US-PGPUB; USPAT	OR	ON	2005/09/15 15:01
S68	893	30/391-394.ccls.	US-PGPUB; USPAT	OR	ON	2006/02/17 12:52
S69	435	173/162.1-162.2.ccls.	US-PGPUB; USPAT	OR	ON	2006/02/17 12:53
S70	257	173/210.ccls.	US-PGPUB; USPAT	OR	ON	2006/02/17 12:59
S71	217	83/647.ccls.	US-PGPUB; USPAT	OR	ON	2006/02/17 12:59

## EAST Search History

S72	458	83/646-647.ccls.	US-PGPUB; USPAT	OR	ON	2006/02/17 13:00
S73	300	277/614.ccls.	US-PGPUB; USPAT	OR	ON	2006/02/17 13:01
S74	1046	277/910.ccls.	US-PGPUB; USPAT	OR	ON	2006/02/17 13:03
S75	746	277/641-643.ccls.	US-PGPUB; USPAT	OR	ON	2006/02/17 13:04
S76	272	285/918.ccls.	US-PGPUB; USPAT	OR	ON	2006/02/17 13:05
S77	367	285/334.ccls.	US-PGPUB; USPAT	OR	ON	2006/02/17 13:06
S78	903	30/391-394.ccls.	US-PGPUB; USPAT	OR	ON	2006/05/11 09:53
S79	439	173/162.1-162.2.ccls.	US-PGPUB; USPAT	OR	ON	2006/05/11 10:02
S80	458	83/646-647.ccls.	US-PGPUB; USPAT	OR	ON	2006/05/11 10:05
S81	0	83/277/285.ccls.	US-PGPUB; USPAT	OR	ON	2006/05/11 10:05
S82	0	277/285.ccls.	US-PGPUB; USPAT	OR	ON	2006/05/11 10:05
S83	272	285/918.ccls.	US-PGPUB; USPAT	OR	ON	2006/05/11 10:12
S84	74	285/344.ccls.	US-PGPUB; USPAT	OR	ON	2006/05/11 10:14
S85	301	277/614.ccls.	US-PGPUB; USPAT	OR	ON	2006/05/11 10:17
S86	1046	277/910.ccls.	US-PGPUB; USPAT	OR	ON	2006/05/11 10:18
S87	755	277/641-643.ccls.	US-PGPUB; USPAT	OR	ON	2006/05/11 10:18
S88	2	"6106453"	US-PGPUB; USPAT	OR	ON	2006/05/11 13:40
S89	5	("2722244" "4884344" "5596810" "6138364" "6212781").PN.	US-PGPUB; USPAT	OR	ON	2006/05/15 14:32
S90	798	30/391-393.ccls.	US-PGPUB; USPAT	OR	ON	2006/05/15 14:32

## EAST Search History

S91	66	("2190156"   "2673630"   "2722137"   "2793661"   "3206989"   "3236111"   "3289798"   "3360021"   "3388728"   "3461732"   "3496972"   "3627389"   "3945120"   "3971132"   "4137632"   "4235017"   "4238884"   "4240204"   "4255858"   "4318224"   "4379362"   "4385443"   "4449062"   "4550501"   "4628605"   "4893994"   "4962588"   "4991818"   "5007172"   "5009012"   "5025562"   "5050307"   "5079844"   "5083376"   "5212887"   "5322302"   "5392519"   "5421091"   "5450925"   "5479711"   "5555626"   "5566458"   "5598636"   "5607023"   "5687483"   "5725058"   "5819420"   "5839347"   "5855070"   "5987758"   "6068405"   "6113832"   "6263979"   "6272757"   "RE35878").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/15 15:31
S92	66	("2190156"   "2673630"   "2722137"   "2793661"   "3206989"   "3236111"   "3289798"   "3360021"   "3388728"   "3461732"   "3496972"   "3627389"   "3945120"   "3971132"   "4137632"   "4235017"   "4238884"   "4240204"   "4255858"   "4318224"   "4379362"   "4385443"   "4449062"   "4550501"   "4628605"   "4893994"   "4962588"   "4991818"   "5007172"   "5009012"   "5025562"   "5050307"   "5079844"   "5083376"   "5212887"   "5322302"   "5392519"   "5421091"   "5450925"   "5479711"   "5555626"   "5566458"   "5598636"   "5607023"   "5687483"   "5725058"   "5819420"   "5839347"   "5855070"   "5987758"   "6068405"   "6113832"   "6263979"   "6272757"   "RE35878").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/15 15:31
S93	0	("6851193").URPN.	USPAT	OR	ON	2006/05/15 15:35
S94	17	("3729823"   "3820543"   "3945120"   "4038721"   "4145811"   "4699036"   "4924727"   "5025562"   "5079844"   "5099705"   "5209022"   "5450925"   "5555626"   "5561909"   "5782000"   "Re35258").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/15 15:41
S95	6	("6286217").URPN.	USPAT	OR	ON	2006/05/15 15:42

## EAST Search History

S96	31	"5212887"	US-PGPUB; USPAT	OR	ON	2006/05/15 16:58
S97	13	("1643721"   "1648008"   "3729823"   "3971132"   "4145811"   "4238884"   "4272996"   "4545123"   "4628605"   "4976164"   "5079844").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/15 17:04
S98	26	("5212887").URPN.	USPAT	OR	ON	2006/05/15 17:05
S99	40	"3945120"	USPAT	OR	ON	2006/05/15 17:09
S100	3	reciprocat\$ same ring same saw same resilient	US-PGPUB; USPAT	OR	ON	2006/05/15 17:09
S101	90	reciprocat\$ same ring same saw	US-PGPUB; USPAT	OR	ON	2006/05/15 17:17
S102	5782	reciprocatsame ring same saw	USOCR	OR	ON	2006/05/15 17:17
S103	167	reciprocate same ring same saw	USOCR	OR	ON	2006/05/15 17:17
S104	13	("1643721"   "1648008"   "3729823"   "3971132"   "4145811"   "4238884"   "4272996"   "4545123"   "4628605"   "4976164"   "5079844").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/16 09:11
S105	26	("5212887").URPN.	USPAT	OR	ON	2006/05/16 09:32
S106	61	hartman.inv. and saw	US-PGPUB; USPAT	OR	ON	2006/05/16 09:34
S107	89	hartmann.inv. and saw	US-PGPUB; USPAT	OR	ON	2006/05/16 09:34
S108	89	S107 not S106	US-PGPUB; USPAT	OR	ON	2006/05/16 09:39
S109	47	(reciprocat\$ near2 saw) same ring	US-PGPUB; USPAT	OR	ON	2006/05/16 09:40
S110	170	(reciprocat\$ near2 saw) same ring	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/16 10:56
S111	131	damp\$ same saw same ring	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/16 11:02
S112	53	damp\$ same tool same ring same noise	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/16 11:02
S113	223	(damp\$ or reduce or reducing) same tool same ring same noise	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/16 11:03
S114	166	30/394.ccls.	US-PGPUB; USPAT	OR	ON	2006/05/16 11:34

## EAST Search History

S11 5	30	("0895349"   "1035358"   "1220100"   "2046135"   "2223727"   "3003773"   "3161241"   "3167135"   "3179185"   "3566978"   "3847229"   "4174113"   "4332340"   "4653338"   "5095998"   "5131476"   "5131666"   "5320177"   "5350025"   "5522606"   "5896934").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/17 10:11
S11 6	6	("6098723").URPN.	USPAT	OR	ON	2006/05/17 10:29
S11 7	2564	reciprocat\$ same ring same groove	USPAT	OR	ON	2006/05/17 10:29
S11 8	13	reciprocat\$ same saw same ring same groove	US-PGPUB; USPAT	OR	ON	2006/05/17 10:29
S11 9	219	reciprocat\$ same saw same ring same groove	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/17 10:39
S12 0	178	tool same ring same groove same noise	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/17 10:39
S12 1	926	30/391-394.ccls.	US-PGPUB; USPAT	OR	ON	2006/09/21 10:05
S12 2	344	30/391-394.ccls. and bearing	US-PGPUB; USPAT	OR	ON	2006/09/21 10:11
S12 3	0	173/62.2.ccls. and bearing	US-PGPUB; USPAT	OR	ON	2006/09/21 10:12
S12 4	98	173/162.1-162.2.ccls. and bearing	US-PGPUB; USPAT	OR	ON	2006/09/21 10:13
S12 5	64	173/210.ccls. and bearing	US-PGPUB; USPAT	OR	ON	2006/09/21 10:13
S12 6	48	83/646-647.ccls. and bearing	US-PGPUB; USPAT	OR	ON	2006/09/21 10:14
S12 7	21	277/614.ccls. and bearing	US-PGPUB; USPAT	OR	ON	2006/09/21 10:14
S12 8	5	277/610.ccls. and bearing	US-PGPUB; USPAT	OR	ON	2006/09/21 10:15
S12 9	115	277/641-643.ccls. and bearing	US-PGPUB; USPAT	OR	ON	2006/09/21 10:16
S13 0	21	285/918.ccls. and bearing	US-PGPUB; USPAT	OR	ON	2006/09/21 10:16
S13 1	3	285/344.ccls. and bearing	US-PGPUB; USPAT	OR	ON	2006/09/21 10:16
S13 2	948	30/391-394.ccls.	US-PGPUB; USPAT	OR	ON	2007/03/14 10:12

## EAST Search History

S13 3	92	30/391-394.ccls. and seal\$	US-PGPUB; USPAT	OR	ON	2007/03/14 10:12
S13 4	193	30/391-394.ccls. and (seal\$ or enclos\$)	US-PGPUB; USPAT	OR	ON	2007/03/14 10:46
S13 5	21	("1866529"   "2984241"   "3260289"   "4452316"   "4644653"   "4727941"   "5042592"   "5513709"   "5607265"   "5676497"   "5759093"   "5832611"   "6012346"   "6048345"   "6085850"   "6119973"   "6138364"   "6368324").PN. OR ("6751875"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/14 10:24
S13 6	48	("2793661"   "3206989"   "3236111"   "3388728"   "3461732"   "3627389"   "3945120"   "3971132"   "4137632"   "4238884"   "4240204"   "4255858"   "4379362"   "4385443"   "4550501"   "4628605"   "4893994"   "4962588"   "5009012"   "5025562"   "5050307"   "5079844"   "5083376"   "5212887"   "5392519"   "5421091"   "5450925"   "5479711"   "5555626"   "5566458"   "5598636"   "5607023"   "5725058"   "5839347"   "6068405"   "Re35878").PN. OR ("6249979"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/14 10:28
S13 7	135	173/162.1-162.2.ccls. and (seal\$ or enclos\$)	US-PGPUB; USPAT	OR	ON	2007/03/14 10:47
S13 8	19	("1774905"   "2024684"   "3168324"   "3511127"   "4592431"   "4681172"   "4723610"   "4776408"   "5082067").PN. OR ("5370193"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/14 10:57
S13 9	479	277/614.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/14 11:03
S14 0	178	277/614.ccls. and groove	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/14 11:28
S14 2	708	277/910.ccls. and (groove same ring)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/14 11:32
S14 3	301	277/641-643.ccls. and (groove same ring)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/14 11:33

## EAST Search History

S14 4	154	285/918.ccls. and (groove same ring)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/14 11:36
S14 5	38	285/344.ccls. and (groove same ring)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/14 11:37
S14 6	392	83/647.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/14 11:38
S14 7	430	83/646.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/14 11:38